

Abstract

Oriented longitudinal magnetic recording media on direct texture glass or glass-ceramic substrates with a film structure of one or more Ni-containing layer, a Cr-containing underlayer, a Co-containing magnetic layer and carbon overcoat exhibits are capable of achieving Mrt OR of > 1.5 , preferably > 1.85 . Such highly oriented glass media shows a significant SNR ($> 2\text{dB}$) and parametric improvement over the counterpart isotropic media with the same film structure on non-textured glass or glass-ceramic substrates.